APPENDIX X

TABLE 17

GRAPHICAL COMPARISON OF FUELS

Low High

Blue water gas, No. 9. B.t.u. per cubic foot= 290 318

Calories per $m^3$ =2585

| Composition Volumetric | Products of Combustion per 100 Volumes of Gas | | | | | |
|---|---|---|---|---|---|---|
| | Air Supply in Percentage of Theoretical Requirements | | | | | |
| | 30% | 100% | 120% | 140% | 180% | 260% |
| $H_2$ 50.80 | 5.00 | | | | | |
| $CH_4$ 0.20 | 13.10 | | | | | |
| CO 40.90 | 0.00 | 0.00 | 9.10 | 18.20 | 36.40 | 72.80 |
| $O_2$ 0,90 | 31.40 | 44.50 | 44.50 | 44.50 | 44.50 | 44.50 |
| CO; 3.40 | 47.00 | 52.00 | 52.00 | 52.00 | 52.00 | 52.00 |
| | 149.00 | 185.40 | 221.70 | 258.0 | 330.60 | 476.00 |
| | 245.5 | 281.9 | 327.30 | 0 | 463.50 | 645 . 30 |
| | 0 | 0 | 272.40 | 372.7 | 408.60 | 590.20 |
| | 181.60 | 227.0 | | 0 | | 1.291 |
| Veight: kg; per $m^3$ | 1 245 | 0 | | 317.8 | | 0.0806 |
| | | | | 0 | | |
| Ib per cubic | 0.077 7 | Percenta ge | | Basis (Wet) | | |
| | 2.04 | | | | | |
| CO | 5 34 | | | | | |
| O | 0.00 | 0.00 | 2.78 | 4.88 | 7.85 | 11.28 |
| CO- | 12.79 | 15.78 | 13.59 | 11.94 | 9.60 | 6.90 |
| HO | 19.14 | 18.45 | 15.89 | 13.95 | 11.52 | 8.06 |
| No | 61.09 | 65.77 | 67.74 | 69.23 | 71.33 | 73.76 |
| $H_2$ ..... | 2.52 | P | ercent age | Basis (Di | T) | |
| CO | 6.60 | | | | | |
| | | 0.00 | 3.31 | 5.68 | 8.85 | 12.27 |
| $CO_0$ | 15.82 | 19.35 | 16.16 | 13.87 | 10.81 | 7.50 |
| No | 75.07 | 80.65 | 80.53 | 80.45 | 80.34 | 80.23 |
| | | | | | | |